15(2) SOV/72-59-1-15/16

AUTHOR: Kopeykin, A. A.

TITLE: Production of Panelling Tiles, Sanitation Products for Technical Purposes, and Wall Blocks in Italy (Proizvodstvo oblitsovochnykh plitok, sanitarno-tekhnicheskikh izdeliy i stenovykh blokov v Italii)

PERIODICAL: Steklo i keramika, 1959, Nr 1, pp 45-48 (USSR)

ABSTRACT: The author visited the following factories working in this field: Ceramice la Companevid at Sassuolo; Ceramice Yoo at Milano; the ceramic tile factory at Cività Castellana; a small factory manufacturing sanitary products for technical purposes; the china and faience factory Ceramice Marcantoni and others. The author states that in the Italian ceramic industry modern high-grade muffle furnaces and electric tunnel furnaces are used (Fig 1) which secure high quality of the products. The Pagano Azzi Signorini wall block factory produces thin-walled hollow coating blocks (Fig 2) and roof tiles. Figure 3 shows the arrangement of the oil-heating system. The production of the Fornace Visana wall block factory also includes tiles. The author describes the production, storage and manufacture of raw materials and finished

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KOPEYKIN, A.A.; BLYUMEN, L.M.

Glazed facing tiles made of local low-melting clays. Stek. i ker. 17 no.9:6-10 S '60. (MIRA 13:9)
(Tiles)

KOPEYKIN, A.A.

Rapid rate of development. Stek. i ker. 18 no.10:7-9 O '61.
(MIRA 14:11)

1. Direktor Nauchno-issledovatel'skogo instituta stroitel'noy keramiki.

(Ceramic industries)

KOPEYKIN, A.A.

The production of facing tiles needs improved equipment. Stek. i ker. 19 no.7:1-4 Jl '62. (MIRA 15:7)
(Ceramic plants--Equipment and supplies) (Tiles)

REMPEL', A.M.; SUKHOV, P.V.; KOPEYKIN, A.A., glavnyy red.; ROKHVARGER, Ye.L., zamestitel' glavnogo red.; VASYUTINSKAYA, A.A., red.; GARTSMAN, B.M., red.; ZAYONTS, R.M., red.; LUNDINA, M.G., red.; NOSOVA, Z.A., red.; PETROV, N.A., red.; RIVKIN, A.M., red.; ROMANOV, P.R., red.; SOKOLOV, P.V., red.; FEYN, Yu.E., red.; KOSYAKINA, Z.K., red.; KASIMOV, D.Ya., tekhn.red.

[Research on clay materials] Issledovanie glinistogo syr'ia. Moskva, Gosstroiizdat, 1963. 119 p. (Kuchino. Gosudarstvennyi nauchno-issledovatel'skii institut stroitel'noi keramiki. Trudy, no.22). (MIRA 17:3)

KOPEYKIN, A.M.

Stand for taking the characteristic of bellows. Priborostroenie no.7: 26 Jl '64. (MIRA 17:11)

133-58-4-13/40

AUTHORS: Petrov, V. K., Kopeykin, A. P. and Mokhir, Ye. D., Engineers

TITLE: Comparison of Methods of Smelting Steel 18KhNVA in Arc Furnaces (Sravneniye metodov vyplavki stali 18KhNVA v dugovykh pechakh)

PERIODICAL: Stal', 1958, Nr 4, pp 326-330 (USSR)

ABSTRACT: In view of the introduction of the application of oxygen in electrosmelting it was necessary to compare the quality and economical indices of various methods of production of structural steel 18KhNVA in 10-ton arc furnaces. The following methods of production were compared:
1) The usual method. The charge consisted of 45-50% of scrap of the same steel, soft iron and nickel. Before charging metal low melting slag consisting of equal amounts of lime, fluorspar and chamotte (1.5% of weight of the metal) was placed on the bottom of the furnace. During melting a similar portion of slag was added under electrodes. After the melt out and checking the chemical composition the melting slag was removed and refining slag put on. The latter was treated during the first 30-40 minutes with coke and then with a powder of 75%

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Comparison of Methods of Smelting Steel 18KhNVA in Arc Furnaces

ferrosilicon. Before tapping ferrotitanium (0.06% of Ti) and aluminium (0.3 kg/t) were introduced.

2) Using "boiling" soft iron. The charge consisted of 60-65% of scrap of the same metal, blooms of boiling soft iron (0.04-0.06C), nickel and ferromanganese. Slag-lumps of limestone and chamotte (2:1) in the amount of 4% of weight of the metal. The reducing period as in the usual practice.

3) Smelting of scrap with blowing with oxygen. Charge: 60% of scrap of the same metal, 5-8% of high alloy scrap and carbon scrap, if necessary nickel was added. Carbon content after melt out 0.25-0.35%. After melt out the bath was blown with oxygen for 10-15 mins, then the melting slag was removed and refining slag put on. The reducing period as in the usual practice. Before tapping ferrotitanium (0.10% Ti) and aluminium (0.5 kg/t) were added.

4) Smelting with oxidation. The charge was made from scrap of the same steel (up to 15%), pig iron (7-8%), scrap of carbon steel and necessary amount of nickel. After the melt out, the oxidation period was carried out during which, due to ore additions, not less than 0.50% of carbon was removed. The carbon content at the end of the

Comparison of Methods of Smelting Steel 18KhNVA in Arc Furnaces

oxidising period was lowered to 0.09-0.12%. At the beginning of the reducing period the slag was treated with coke powder then with ferrosilicon. In the middle of the refining period after the introduction of ferrochromium an addition of alloy AMS (3kg/t) was made. Before tapping ferrotitanium (0.01% Ti) and aluminium (0.5 kg/t) were added. The finished metal in all experimental heats contained 0.14-0.17% C. The metal was bottom poured in 2.7 ton ingots. Metal from all heats was rolled into rounds and squares 110-125 mm. In order to evaluate the quality of the metal from one ingot from each heat three samples were taken: A, B and X. A and X 400 mm long from the top and bottom parts respectively and B, 1500 mm long - from the middle part of the rolled ingot. The investigation of the macrostructure, fracture and non-metallic inclusions was carried out on specimens cut out from A, B and X. For other tests, specimens were cut from B. The macrostructure of metal from all heats was found to be satisfactory. Fracture: this was investigated after two kinds of heat treatment: after hardening from 860°C and after the same hardening and annealing at 550. On a number

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Comparison of Methods of Smelting Steel 18KhNVA in Arc Furnaces

of fractures the presence of "platforms" was observed. These were previously found to be due to the accumulation of nitrides and oxides of titanium. During the crystallisation of ingots a part of these non-metallic inclusions, precipitates in the form of comparatively coarse films along the grain boundaries. After rolling these films become elongated along the axis of rolling sectors (in fracture - "platforms"), which form weak spots in the metal. The percentage of heats in which "platforms" were found for all four types of smelting practices was: 1) 44%; 2) 27.2%; 3) 9.1% and 4) 0%. Mechanical properties were checked on longitudinal and transverse specimens. The results are shown in Figs. 1, 2 and Table 1. Non-metallic inclusions - Table 2, Fig.3; mean chemical composition of non-metallic inclusions - Table 3. Investigation of the tendency to growth of austenitic grains indicated that in this respect the smelting practice has no influence. Technico-economical indices of the individual smelting practices are given in Table 4. It is concluded that the most economical method of smelting 18KhNVA steel is the melting of alloyed scrap with blowing the bath with oxygen. The quality of metal is

Comparison of Methods of Smelting Steel 18KhNVA in Arc Furnaces

satisfactory and is not worse than when the metal is produced by other methods.
There are 4 tables and 3 figures.

ASSOCIATION: Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Works)

1. Steel--Production 2. Electric furnaces--Effectiveness
3. Slags--Properties 4. Steel--Mechanical properties

KOPEYKIN, B.A., inzhener.

Braking devices for woodworking machines. Der.i lesokhim.prom. 2 no.10:12-14 O '53. (MLRA 6:9)

1. Otdel okhrany truda i tekhniki bezopasnosti Minlesbumproma. (Woodworking machinery) (Brakes)

KOPEYKIN, Boris Aleksandrovich; DENISOVA, I.S., redaktor;RAKOV, S.I. tekhnicheskiy redaktor.

[Safety measures in the operation of woodworking machines] Mery bezopasnosti pri rabote na derevo-obrabatyvaiushchikh stankakh. [Moskva] Izd-vo VTsSPS Profizdat, 1954. 115 p. (MLRA 8:8)
(Woodworking machinery--Safety measures)

KOPEYKIN, B.A.; PEKLO, M.I.; KHANIN, I.F.

Textbook on safety techniques ("Principles of safety techniques in the woodworking industry" M.M.Bender, Reviewed by B.A.Kopeikin, M.I. Pekle and I.F. Khanin.) Der.prom.4 no.4:30-31 Ap '55
(Bender M.M.) (MLRA 8:6)
(Woodworking industries--Safety measures)

KOPEYKIN, B.A., inzhener.

Striving for quality in furniture. Der.prom. 5 no.3:16 Mr '56.
(MIRA 9:7)

1.Proizvodstvennoye upravleniye Minbumdrevproma SSSR.
(Furniture industry)

KOPEYKIN, B.A., inzhener.

Some shortcoming of a manual on safety techniques. "Principles of safety technique" by L.L. Nikitin, Reviewed by B.A. Kopeikin. Der. prom. 6 no.5:26 My '57. (MLRA 10:6)
(Woodworking industries--Safety measures)
(Nikitin, L.L.)

KOFEYKIN, B.A.; SERGEYEV, Ye.Ye.

Textbook on the organization and planning of production. Der. prom. 14 no.4:29 Ap '65. (MIRA 18:5)

1. Belorusskiy tekhnologicheskiy institut im. S.M.Kirova.

KOPEYKIN, Fedor Filippovich; ROTENBERG, A.S., red.izd-va; PUL'KINA, Ye.A., tekhn.red.

[Collective building of private homes] Kollektivnoe stroitel'stvo individual'nykh domov. Leningrad, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1958. 42 p. (MIRA 12:8)

1. Nachal'nik stroitel'nogo tsekha fabriki "Skorokhod" (for Kopeykin).

(Building)

ALABUZHEV, P.M.,prof.; KOPEYKIN, G.F., inzh.

Electropneumatic hammer with a striker restraining mechanism.
Izv. vys. ucheb. zav.; gor. zhur. no.9:76-86 '59. (MIRA 14:6)

1. Novosibirskiy elektrotekhnicheskiy institut. Rekomendovana kafedroy teoreticheskoy i prikladnoy mekhaniki.
(Pneumatic tools)

ALABUZHEV, P.M., prof.; KOPEYKIN, G.F., inzh.

Electromechanical hammer drill with a head having a lock mechanism. Izv. vys. ucheb. zav.; gor. zhur. no.5:94-100 '61. (MIRA 16:7)

1. Novosibirskiy elektrotekhnicheskiy institut. Rekomendovana kafedroy mekhaniki.

(Boring machinery)

ALABUZHEV, P.M.; KOPEYKIN, G.F.; SHEKHOVTSOV, B.A.

The NETI-1-BM electric drill. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 17 no.1:25 '64. (MIRA 17:2)

ALABUZHEV, P.M., prof.; VIL'NIT, L.N., starshiy prepodavatel'; KOPEYKIN, G.F., starshiy prepodavatel'; TSIVINSKIY, Yu.P., inzh.

Movement of the striker and body of an electromechanical hammer drill with a striker-restraining mechanism. Izv. vys. ucheb. zav.; gor. zhur. no.6:74-80 '61. (MIRA 16:7)

1. Novosibirskiy elektrotekhnicheskiy institut. Rekomendovana kafedroy mekhaniki.

(Boring machinery)

L 0467-65

ACCESSION NR: AP5007836 S/0288/64/000/003/0061/0066

AUTHOR: Albuzhev, P. M.; Kopeykin, G. F.; Kuz'menko, Yu. P.; Cheshev, V. F.; Litvinov, A. M.

TITLE: A study of torque meters

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, no. 3, 1964, 61-66

TOPIC TAGS: spring potentiometer, torque meter, capacitance torque meter, tensometric torque meter

ABSTRACT: Modern technology usually employs three methods for the measurement of a. breaking, b. reactive moments transmitted to the stator of the motor and deformations of links which transmit the moment. Many practical devices utilize elements. The authors concentrated their study on the tensometric and capacit- (with appropriate amplifiers) for the registration of torques in the shaft of the impact unit of an electro-mechanical hammer. Tests [illegible] meters did not supply satisfactory records of either the active or the reactive moments (the vibrations of the electric motor, hammer recoil, and the passage of shock waves through the shaft cause distortions in the oscillograms). Capacitative meters yield poor

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L 35487-65
ACCESSION NR: AP5007836

results for the same reasons. However, a four-contact spring-potentiometric meter [illegible] the authors at the Laboratoriya teoreticheskoy mekhaniki (Laboratory of [illegible] of the Novosibirskiy elektrotekhn[illegible] Institut (Novosibirsk [illegible] Engineering Institute) and described earlier [illegible] May 1963, [illegible] the Komitet po delam izobreteniy i otkrytiy pri sovete Ministrov SSSR (Committee on Inventions and Discoveries, Council of Ministers SSSR) [illegible] satisfactory [illegible] it actually reacts to the recoil of the impact unit and to the passage of shock [illegible] draft. This meter does not need [illegible] and may be used for the [illegible] mechanisms and machines [illegible] [illegible] used loads [illegible]. 9 formulas and 3 figures.

ASSOCIATION: Novosibirskiy elektrotekhnicheskiy institut (Novosibirsk Electrical Engineering Institute)

SUBMITTED: 18Dec63 ENCL: 00 SUB CODE: EE

NO REF SOV: 015 OTHER: 001

Card 2/2

ALABUZHEV, P.M., prof.; BONDAREV, V.V., inzh.; ZUYEV, A.K., inzh.; KOPEYKIN, G.F., inzh.; TRUS', A.M., inzh.; YARUNOV, A.M., inzh.

Dynamic strength of springs in impact action machines. Izv.vys. ucheb.zav.; gor.zhur. 7 no.12:58-64 '64. (MIRA 18:2)

1. Novosibirskiy elektrotekhnicheskiy institut. Rekomendovana kafedroy teoreticheskoy mekhaniki.

L 02511-67 EWT(d)/EWT(m)/EWP(w)/EWP(c)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(l) IJP(c)

ACC NR: AR6015964 SOURCE CODE: UR/0277/65/000/012/0059/0059

AUTHOR: Alabuzhev, P. M.; Bondarev, V. V.; Kopeykin, G. F.; Trus', A. M.; Yarunov, A.M.

TITLE: Calculating the durability of cylindrical coil springs in impact-action machines

SOURCE: Ref. zh. Mashinostroitel'nyye materialy, konstruktsii i raschet detaley mashin. Gidroprivod, Abs. 12.48.486

REF SOURCE: Sb. dokl. k Novosib. nauchno-tekhn. konferentsii po mashinostr. Ch. 2. Novosibirsk, 1964, 51-57

TOPIC TAGS: helical spring, impact strength, durability

ABSTRACT: A method is proposed for calculating the durability of cylindrical coil springs. The method is based on the energy theory for loss of work capacity of a spring under rotating loading. A formula is given for preliminary determination of the service life to destruction of a spring in impact-action machines. [Translation of abstract]

SUB CODE: 13

Card 1/1 egh UDC: 621-272.2.001.24

a = 9.92 Å, c = 4.69 Å and c/a = 0.52. Microhardness = 1234 kg/mm^2. Publications contain no data on the following production of the rhenium-manganese alloy. It may be seen from roentgenographic results that the annealed (for 360 hours in vacuum at 1000°) alloy is homogeneous and has a lattice of the σ phase. Parameter: a = 9.14 Å, c = 4.75 Å, c/a = 0.52 (Table 1). The σ phase forms from enamel (Fig 1). The observation of σ phases in the systems mentioned in the title leads to additional difficulties in the theoretical explanation of the conditions of formation of these compounds of transition metals. If these phases are regarded as a type of electron compounds (Ref 3), it strikes that rhenium similar to manganese shows an anomalous behavior as compared to metals of other groups. There are 1 figure, 1 table, and 4 references, 1 of which is Soviet.

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR (Institute of Metallurgy imeni A. A. Baykov of the Academy of Sciences, USSR)

SUBMITTED: November 17, 1958

~~5 (c)~~ 18.1200

AUTHORS: Ageyev, N. V., Corresponding Member, AS USSR, 66456
Lopotskiy, Ch. Ya., Savitskiy, Ye. M., SOV/20-129-3-24/70
Shekhtman, V. Sh.

TITLE: On the Interaction of the Elements of the VIIA Subgroup With Transition Metals

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 3, pp 559 - 562 (USSR)

ABSTRACT: Mn is known to be an anomalous metal with regard to combining forces between the atoms, the crystalline structure, etc. (Refs 1,2). Active interaction with the elements of the subgroups IVA, VA, and VIA is typical of rhenium. In connection herewith, σ- and χ-phases are formed in binary systems (Refs 3,4). Mn and Re are analogous with regard to the formation of oxides, acids, etc. It is, however, unknown whether they are analogous with regard to interaction with metals. Table 1 shows distinct differences of the physical properties of Mn, Re, and Tc. Great similarity of Mn and Re as to the formation of metallic phases can be seen in analysing the interaction of Mn and Re with transition metals. Figure 1 shows the dependence of the value of the dimension factor (razmernyy faktor) P

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On the Interaction of the Elements of the VIIA Subgroup With Transition Metals

66456
SOV/20-129-3-24/70

phase of Mn is formed as an independent compound in systems on Re basis. Since there are no papers available on Tc alloys, the binary systems can not be completely classified on the basis of subgroup VIIA. It may be assumed that Tc reacts in alloys in a similar way as Re. The comparatively distinct classification of the binary systems of transition metals with Mn and Re as well as a restricted set of phases existing in these systems are obviously related to the key position of subgroup VIIA among transition metals. There are 1 figure, 1 table, and 7 references, 3 of which are Soviet.

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR (Institute of Metallurgy imeni A. A. Baykov of the Academy of Sciences, USSR)

SUBMITTED: August 12, 1959

Card 3/3

18.1275

69059

AUTHORS: Savitskiy, Ye. M., Kopetskiy, Ch. V. S/078/60/005/03/047/048
B004/B005

TITLE: Physicochemical Interaction Between Manganese and Niobium

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 3, pp 755-757 (USSR)

ABSTRACT: It was the object of this paper to draw the phase diagram Mn - Nb up to a content of 30% by weight of Nb. Alloys with a niobium content of 2.26, 2.97, 5.6, 5.64, 16.65, 17.56, and 29.85% by weight were investigated. The niobium was introduced into the alloys as 40-50% ligature with Mn. An investigation of the microstructures(Fig 1) proves the formation of a eutectic at about 5.64% of Nb by weight. The X-ray analysis confirmed the results of the investigation of the microstructures. Beginning with 5.64% of Nb, the Debye patterns show lines of a new phase which belong to the compound Mn_2Nb with a structure of the $MnZn_2$ type. The lattice constants of this compound are indicated. The microhardness of the compound Mn_2Nb checked by a TP-apparatus amounts to 768 kg/mm^2, and is lower than the microhardness of the solid niobium solution in manganese (1020 kg/mm^2). An increasing niobium content reduces steadily the microhardness down to 650 - 700 kg/mm^2

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18.1275

S/078/60/005/011/005/025
B015/B060

AUTHORS: Savitskiy, Ye. M., Kopetskiy, Ch. V.

TITLE: Constitution Diagrams of Systems of Manganese With Titanium and Zirconium

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 11, pp. 2422-2434

TEXT: The constitution diagram for manganese-zirconium (up to 30 wt% Zr) and for manganese-titanium (up to 30 wt% Ti) was set up by the methods of microstructural phase analysis, X-ray phase analysis, thermal analysis, and measurement of hardness and microhardness. The alloys were prepared by repeated remelting in a vacuum high-frequency furnace of the type МВП-4 (MVP-4) with generator of the type ЛГП-30 (LGP-30). The alloys (Table 1, composition) were examined both in the cast and in the annealed state. A ТП (TP) apparatus served for the hardness determination, a ПМТ-3 (PMT-3) apparatus for the microhardness, an РКД(RKD) camera served for the X-ray phase analysis of the powder

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Constitution Diagrams of Systems of Manganese With Titanium and Zirconium

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B015/B060

samples, and, finally, Kurnakov's pyrometer and a device worked out by I. I. Tyurin (Fig. 1) served for the differential thermal analysis. The pictures of microstructure (Fig. 2), of the Mn-Zr alloy show that already at a content of 4.5 wt% Zr a second phase is formed, identified as $ZrMn_2$ compound by the X-ray analysis (Table 2, data of X-ray analysis) and having the following lattice parameters: a = 5.029 kX, c = 8.234 kX, c/a = 1.637. The X-ray pictures show furthermore that in cast specimens, Mn always occurs in the β-modification, whereas only α-Mn is observed with annealed specimens. The results of X-ray phase analysis (Table 3) further show that the $ZrMn_2$ compound apparently exhibits no region of homogeneity. Data obtained from the investigation of hardness and micro-hardness of Mn-Zr alloys (Table 4) are in good agreement with results yielded by other methods. Microstructural examinations of the Mn-Ti system (Fig. 4, pictures) as well as the X-ray structural pictures indicate the existence of two intermetallic compounds in the concentration range from 0 to 30 wt% Ti. One is $TiMn_2$ and has a hexagonal lattice with a = 4.812 kX, c = 7.817 kX, c/a = 1.624 (Table 5, data obtained from the X-ray picture of $TiMn_2$). The second compound, which exists at

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concentrations from 6.55 to 22.5 wt% Ti, probably has the formula $TiMn_4$ and results from a peritectic reaction at 1230°C (Table 6, data obtained from the powder X-ray picture of the new compound). Results yielded by the phase X-ray analysis of the system Mn-Ti are given in Table 7, the values from hardness tests in Table 8, values relating to microhardness in Fig. 6, and the constitution diagram in Fig. 8. Table 9 shows the results of hardness- and microhardness tests for the Mn-Zr system, and Fig. 7 shows the respective constitution diagram. Additions of zirconium and titanium to manganese have little effect on the $\alpha \rightleftarrows \beta$ transition, which takes place at 730°C in both cases. In the Mn-Zr system, the $\beta \rightleftarrows \gamma$ transition runs according to a peritectoid reaction at 1125°C, and the same holds for the Mn-Ti system at 1160°C. In both systems the alloys are hardened according to a eutectic reaction, and, more precisely, at 1160°C for the Mn-Zr system and at 1195°C for Mn-Ti. The $\gamma \rightleftarrows \delta$ transition takes place at 1225°C for both systems according to a peritectic reaction. Hardness tests showed that the intermetallic compounds $ZrMn_2$, $TiMn_2$, and $TiMn_4$ have a considerably lower hardness degree than α- or β-Mn. There

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Constitution Diagrams of Systems of Manganese With Titanium and Zirconium

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B015/B060

are 8 figures, 9 tables, and 10 references: 1 Soviet and 5 US.

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR (Institute of Metallurgy imeni A. A. Baykov of the Academy of Sciences USSR)

SUBMITTED: August 19, 1959

Card 4/4

S/078/60/005/011/017/025
B015/B060

AUTHORS: Savitskiy, Ye. M., Kopetskiy, Ch. V.

TITLE: Constitution Diagram of the Manganese - Tantalum System

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 11, pp. 2638 - 2640

TEXT: The Mn - Ta system was studied up to 24.68 at% Ta by the methods of microstructural and X-ray structural phase analysis, thermal analysis, as well as the microhardness method. The alloys were melted in a high-frequency vacuum furnace of the type МВП-4 (MVP-4) and alloys with 0.93, 1.0, 2.86, 3.64, 6.0, 8.0, 12.22, 27.58, and 51.90 wt% of tantalum were prepared. The alloys were very brittle, especially those containing 6-12% Ta. The microstructural analysis (Fig. 1) showed that alloys with 0.93 and 1.0 wt% Ta constitute a solid solution on the basis of manganese. In the alloy with 2.86 wt% Ta a second phase, which increases with increasing tantalum content, begins separating. It separates in a form which is characteristic of a eutectic reaction of the components. In alloys with 8.0 wt% Ta and over, coarse, overeutectic separations of an intermetallic

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compound were observed. X-ray analysis confirmed the last-mentioned results and it was noted that the new phase was Mn_2Ta with a crystal lattice a = 4.842 kX, c = 7.895 kX, c/a = 1.630. Thermal analysis of the alloys was carried out with an apparatus described in Ref. 3, using tungsten/rhenium thermoelements of the type ВР 5/20 (VR 5/20). Additions of tantalum to manganese cause a reduction of the melting point of the alloys down to the eutectic horizontal running at 1175°C. Tantalum has little effect on the temperature of the $\alpha \rightleftarrows \beta$ transformation taking place at 750°C. The microhardness was measured by a ПМТ-3 (PMT-3) instrument, and the microhardness of the compound Mn_2Ta with 730 kg/mm^2 was found to be considerably lower than that of the solid solution on the basis of α-Mn (1100 - 1180 kg/mm^2). The Mn - Ta constitution diagram was constructed on the strength of results obtained (Fig. 2). There are 2 figures and 4 references: 2 Soviet, 1 German, and 1 US.

SUBMITTED: May 18, 1960

Card 2/2

KOPETSKIY, Ch. V.

Cand Tech Sci - (diss) "Study of the physico-chemical reaction of manganese with rare metals." Moscow, 1961. 22 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Labor Red Banner imeni I. V. Stalin); 120 copies; price not given; (KL, 10-61 sup, 215)

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26392
S/032/61/027/008/017/020
B124/B215

AUTHORS: Savitskiy, Ye. M., Kopetskiy, Ch. V., Pekarev, A. I., and Novosadov, M. I.

TITLE: Device for zone melting of high-melting metals and alloys by electron bombardment

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 8, 1961, 1041 - 1042

TEXT: A device for zone melting (Fig. 1) was designed in the Laboratoriya redkikh metallov i splavov Instituta metallurgii AN SSSR (Laboratory of Rare Metals and Alloys of the Institute of Metallurgy, AS USSR) on the basis of western papers (A. Calverley, M. Davis, R. F. Lever, J. Sci. Inst., 34, 4, (1957); H. R. Smith, J. of Metals, 11, 2 (1959)). This device may be used to obtain single-crystal rods 150 - 200 mm long and 3 - 5 mm in diameter for use in radioelectronics, in the manufacture of precision instruments, and for research purposes. In electron bombardment, a zone is melted with a width approximately equal to the diameter of the specimen serving as anode. The liquid metal is kept in the melted zone by means of surface tension. The above method permits

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Device for...

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S/032/61/027/008/017/020
B124/B215

the purification of rods 12 - 14 mm in diameter. The support 2 for fixing the specimen 3 is placed on the water-cooled plate 1. Tantalum springs which permit free expansion of the specimen during heating, are used for fixing the specimen in perpendicular position between the molybdenum clamps 4. The support with the fixed specimens is insulated from the plate and serves as an anode. The cathode is a loop of tungsten filament 0.6 - 0.7 mm in diameter, or is made of tantalum foil. It is fixed in position by the holders 5 made of steel. The cathode is heated by a charged copper wire connected to the holders. The support with the cathode holders is adjusted by a guide nut which is driven out of the working chamber by a conical, vacuum-tight, mobile device. One cathode holder and the plate are earthed. The electrons emitted from the cathode are focused by means of two parallel molybdenum plates placed at a distance of 4 - 5 mm from each other. The plates have 5 - 7 mm openings. The whole working chamber is enclosed by a water-cooled steel or glass envelope 7. The guide nut is rotated by a d-c electric motor 8 over a belt drive and worm reduction gear 9 at a total transmission ratio of 1:100. The electric motor is turned off by the limit switches 10 at a distance of 1 - 1.5 cm between focusing plates and specimen holders. The vacuum

Card 2/5

Device for...

system consists of a BH-2(VN-2) forepump and a BA-05-1 (VA-05-1) standard unit. The latter consists of an oil vapor diffusion pump of type H5 (N5), a slider, and a chamber with ionization and thermocouple manometers. A vacuum of $1 \cdot 10^{-5}$ mm Hg at an evacuation rate of 3000 l/min may be attained in the system. A rectifier consisting of a step-up transformer and four KP-110 (KR-110) kenotrons connected in parallel, was used for feeding the anode grid. The rectifier guarantees semiperiod rectification with a voltage of 3.6 kv and a maximum current of approximately 350 ma. The above feeding system permits a continuous regulation of the metal temperature and the elimination of unexpected overcharges. For visual checking of the melting process, a lens was inserted into the glass envelope through which enlarged images of the cathode heated to 2000 - 2500°C, of the focusing screens, and the zone of the melted metal can be projected onto a screen. For the purpose of degassing the specimen before zone melting, the specimen is annealed in vacuo by means of an electron beam, 100 - 300°C below the melting point of the material. The melting conditions for some high-melting metals are given in a table. The new device was used for preparing

Card 3/5

Card 4/5

KOPEYKIN, I. S.

PA 46/49T31

USSR/Engineering
Lignites
Briquetting

Aug 48

"Industrial Briquetting of Lignites," I. S. Kopeykin, Engr, M. P. Pokrovskiy, Technician, 5 pp

"Za Ekonomiyu Topliva" Vol V, No 8

Describes results of experiments conducted 1946 - 1948, studying lignites from Bashkir and Ukrainian republics under laboratory, semi-industrial, and industrial conditions, obtaining briquettes from these lignites, and treating the briquettes chemically.

[redacted]

46/49T31

KOPYKIN I. S.

PA 43/49T81

USSR/Minerals
Lignite
Briquetting

Oct 48

"Problem of Briquetting Lignites From the Moscow Coal Fields," I. S. Kopeykiy, Engr, M. P. Pokrovskiy, Tech, 2 pp

"Za Ekonomiyu Topliva" Vol V, No 10

Discusses briquetting of coal obtained from mines around Moscow, detailing classification, crushing, drying, pressing, and cooling.

43/49T81

TSOPIKOV, G.M., insh.; KOPEYKIN, K.F., insh.

Using coal from Kibastus. Elek.sta. 31 no.5:82-85
My '60. (MIRA 13:8)
(Krasnogorsk—Electric power stations)

AUTHORS: Trukhan, V. I., Member of the Supreme Soviet of the USSR, and Foremen: Kopeykin, M. F.; Shtykh, A. P.; Samoylov, V. I.; Baldina, Ye. A. 52-58-5-3/30

TITLE: Appeal to All Operators, Specialists and Workmen of the Most Important Professions in Enterprises of the Petroleum and Chemical Industry (Ko vsem operatoram, apparatchikam i rabochim vedushchikh professiy predpriyatiy neftyanoy i khimicheskoy promyshlennosti)

PERIODICAL: Neftyanik, 1958, Nr 5, p 3 (USSR)

ABSTRACT: This appeal to all operators, specialists and workmen of the petroleum and chemical industry enumerates the achievements attained by chemical industry workers in 1957 and it urges them to make a further effort to increase the output of fertilizers, synthetic rubber, paints, plastics, etc. It also urges them to improve processing methods by taking advantage of advanced techniques and automation. A pledge by various teams of chemical plants, shops and factories is included in this appeal. They pledge to improve operating conditions of processing units, to obtain better operational results, to overfulfill the annual production plan, and to hit new peaks in the output of chemicals. The results of operations carried out during the first quarter of 1958 indicate that the obligations undertaken by the chemical industry workers will be discharged in time.

Card 1/1 1. Petroleum industry-USSR 2. Chemical industry--USSR 3. Personnel --Pledges

USSR/Human and Animal Morphology. Circulatory Syst[illegible]. S-2

Abs Jour : Ref Zhur - Biol., No 7, 1958, No 31287

Author : Kopeykin N.G.
Inst : Not Given
Title : On the Anatomy of the Collateral Arterial Vessels of the Male Genital Gland.

Orig Pub : Tr. Gor'kovsk. gos. med. in-ta, Gor'kiy, Knigoizdat, 1956, 26-29

Abstract : In 62 prepared fetuses of children and adults, the sources of the collateral blood supply of the testes were established in the area of different compartments of the internal spermatic artery. Moreover, other vessels participate in the blood-supply of the testes: in the abdominal cavity, branches of renal and of deep ileosacral arteries (A); in the area of the inguinal canal, branches of the outer spermatic A and the A of the ejaculatory duct; in the scrotal compartment, external spermatic arteries in the tissue of the testicle, there are

Card : 1/2

USSR / Human and Animal Morphology (Normal and Pathological). Arterio-Vascular System. Vessels. S

Abs Jour : Ref. Zhur - Biologiya, No. 3, 1959, 12322

Author : Kopeykin, N.G.
Inst : Gorkiy State Medical Institute
Title : On the Anatomy of Arteries of the Dererent Duct.

Orig Pub : Tr. Gor'kovsk. gos. med. in-ta. Gor'kiy, Knigoizdat, 1956, 118-121

Abstract : After injection of the vessels with colored substances, it was shown in 68 specimens that the deferent duct (DD) most frequently receives arterial branches from two sources, more rarely from three and in one case from five. The sources of DD arteries are varied. Topographic

Card 1/2

KOPEYKIN, N.G. (Gor'kiy)

Device for measuring the lumen and thickness of vascular walls. Arkh. pat. 27 no.11:71-73 '65.

(MIRA 18:12)

1. Kafedra anatomii (zav. - doktor med.nauk A.S.Obysov) Gor'kovskogo meditsinskogo instituta imeni S.M.Kirova. Submitted July 25, 1964.

Kopeykin, P.A.

DOMBRACHEVA, Ye.F.; KOZLOV, A.M.; KRICHEVSKIY, M.Ye.; LAPITSKIY, M.A.; LISTOVSKIY, N.D.; LUKANOV, M.A.; MANUKOV, N.P.; MICHURINA, V.V.; POLYACHENKO, A.V.; TIMOFEYEV, N.A.; TSVETKOV, V.S.; CHISTYAKOV, V.D.; KOPEYKIN, P.A., insh., red.; KRYUKOV, V.L., red.; KOBYLYAKOV, L.M., red.; ZUBRILINA, V.P., tekhn. red.

[Practices in tractor repair] Opyt remonta traktorov. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 301 p. (MIRA 11:7)
(Tractors—Maintenance and repair)

LAPITSKIY, Mikhail Andreyevich; ASTVATSATUROV, Gayk Gareginovich; KOZLOV, A.M., retsenzent; LOSEV, V.N., inzh., retsenzent; KOPNYKIN, P.A., inzh., red.; TIKHANOV, A.Ya., tekhn.red.

[Equipment for dismounting, assembling, and adjusting diesel tractors] Oborudovanie dlia razborki, sborki i regulirovki dizel'nykh traktorov. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 139 p. (MIRA 13:7)
(Tractors--Maintenance and repair)

KOPEYKIN, V., inzh.

Young technicians, do your own installation of automatic control for water pumps on farms, in workers' settlements, in your school. IUn.tekh. 5 no.6:6-7 Je '61. (MIRA 14:9)
(Pumping machinery) (Automatic control)

KOPEYKIN, V.

Installation of radio systems in schools. IUn.tekh. 6 no.9:68-71 S '61. (MIRA 14:10)
(Radio in education) (Radio--Apparatus and supplies)

KOPEYKIN, V., inzh.

Homemade luxmeters. IUn.tekh. 6 no.10:78-80 O '61.
(MIRA 14:11)
(Photometers)

SHCHERBAKOV, V. (Moskovskaya obl.); BORCVKOV, V.; KOZLOV, Yu. (st. Alabushevo, Moskovskoy obl.); KOPEYKIN, V. (g. Pushkino); KOLOSOV, I. (g. Leningrad); RAKCHEYEV, N. (g. Torzhok); MARTYNOV, K.

Repaired by amateurs. Radio no.8:47-48 Ag '61. (MIRA 14:10)
(Television--Repairing)

5(0)

AUTHOR: Kopeykin, V. A.

SOV/131-59-8-10/14

TITLE: News in Brief. Mendeleyev Congress on General and Applied Chemistry

PERIODICAL: Ogneupory, 1959, Nr 8, pp 379-381 (USSR)

ABSTRACT: The VIII Mendeleyev Congress was held in Moscow in April 1959. The section of chemistry and technology of silicates was attended by about 500 delegates from Moscow, Leningrad, Kiyev, Khar'kov, Riga, Novorossiysk, Krasnoyarsk, Sverdlovsk, Gor'kiy, Minsk, and Tbilisi as well as from the Hungarian People's Republic, the East-German and the Czechoslovakian Republic. Academician P. P. Budnikov of the AS USSR opened the work of this section. Among others the following subjects were discussed: synthesis of refractories with increased thermal and chemical stability; production of new materials from highly refractory pure metallic oxides, carbides, nitrides, borides, and cermets. The section was presented more than 60 reports. P. S. Mamykin and N. V. Zinov'yev reported on research results of refractory and ceramic properties of the system chromite

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alumina. P. P. Budnikov and V. G. Savel'yev referred to the use of barium monoaluminate ($BaO.Al_2O_3$) as a binding agent for the production of heatproof concrete. N. I. Voronin, N. I. Krasotkina, and V. A. Smirnova reported on refractory carborundum products on nitride binding. Ye. Ya. Antonova and A. A. Appen spoke about a new type of heat-resisting glass-metallic protective coatings for steel against the action of air at high temperatures. G. V. Kukolev and K. A. Mikhaylova dealt with the influence exerted by active additions on the density of refractories during the process of pressing and on the properties of burnt samples. Ya. V. Klyucharov, S. A. Levenshteyn, and Ch'en Ti-chien explained problems related to the mechanism of the spinal formation $MgO.Al_2O_3$ and $MgO.Cr_2O_3$. K. S. Mutateladze and N. G. Dzhincharadze discussed the production of a new kind of binding agents on the basis of alunite. N. K. Antonevich reported on electric dehydration of ceramic suspensions. In the NIIStroykeramika various types of continuously working electric dehydration machines were designed. M. K. Gal'perina and Ye. N. Zavarzina reported on new investiga-

News in Brief. Mendeleyev Congress on General and Applied Chemistry

tion methods for drossing properties. M. G. Manvelyan spoke about an extensive utilization of natural alkali aluminum silicates. V. V. Myshlyayeva and I. V. Bogdanova lectured on an economical chemical analysis of silicates. N. N. Sinel'nikov disputed the theory of recrystallization of quartz in tridymite by melting only. S. M. Shotenberg dealt with the determination of technological properties of kinds of clay by the thermographical method. P. V. Sokolov lectured on the dynamics of charging the mass in gypsum molds. It was noted with satisfaction that many reports were written by young scientists.

KOPLYKIN, V.A.; POLUBOYARINOV, D.N.

Phase composition of ceramics having a high alumina content.
Ogneupory 25 no.12:566-572 '60. (MIRA 14:1)

1. Khimiko-tekhnologicheskiy institut im.Mendeleyeva.
(Ceramics)

L 32046-66 EWP(e)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/WW/JG/AT/WH

ACC NR: AP6013338 (A) SOURCE CODE: UR/0363/66/002/004/0604/0607

AUTHOR: Meyerson, G.A.; Fekhretdinov, F.A.; Kopeykin, V.A.; Medvedev, A.A.; Moiseytseva, Z.K. 62 B

ORG: none

TITLE: Thermodiffusive interaction of tantalum and boron carbide powder in a vacuum

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v.2, no. 4, 1966, 604-607

TOPIC TAGS: tantalum, boron compound, tantalum compound, carbide, thermal diffusion

ABSTRACT: The object of the study was to determine the phase composition and arrangement of diffusion layers on tantalum obtained by thermal diffusion in a boron carbide charge at 1200 – 1700C in a vacuum of 3×10^{-4} mm Hg. The phase composition and structure of the coatings on tantalum were analyzed by x-ray diffraction and microscopic examination. A diffusion coating consisting of the borides TaB_2, TaB, and Ta_2B and up to 4μ thick was found to be formed on the surface of the samples at 1200, 1300, and 1400C. After treatment at 1500, 1600, and 1700C, the powder patterns show strong lines of tantalum carbide TaC, and faint lines of TaB_2 and Ta_3B_4, indicating that TaC is the main phase in the reflecting layer. A faint line corresponding to the strongest

Card 1/2 UDC: 546.683 + 546.27'261

Card 2/2

KOPEYKIN, V. A. Cand Tech Sci -- "Study of the phase composition of high-alumina ceramics." Mos, 1961 (Min of Higher and Secondary Specialized Education RSFSR. Len Order of Labor Red Banner Technological Inst im Lensovet). (KL, 4-61, 197)

OKOLOV, F.S.; NIKOLOV, S.Kh.; IVANOV, A.P.; KOPEYKIN, [illegible]
(Krasnodar)

Effect of ultrasonic waves and the temperature on the colloidal characteristics of the blood serum in man. Biul. eksp. biol. i med. 55 no.2:53-55 F'63. (MIRA 16:6)

1. Iz kafedry obshchey gigiyeny (zav. - prof. F.S.Okolov) Kubanskogo meditsinskogo instituta.

(ULTRASONIC WAVES—PHYSIOLOGICAL EFFECT)
(HEAT—PHYSIOLOGICAL EFFECT)
(SERUM)

ACC NR: AP7002672 SOURCE CODE: UR/0109/67/012/001/0132/0136

AUTHOR: Kopeykin, V. I.

ORG: none

TITLE: Calculating the directive gain of a rectangular aperture in the Fresnel region

SOURCE: Radiotekhnika i elektronika, v. 12, no. 1, 1967, 132-136

TOPIC TAGS: SHF antenna, antenna directivity

ABSTRACT: C. Polk suggested a formula for the directive gain of a rectangular cophasal aperture in the Fresnel region, for a uniform amplitude field distribution over the aperture (IRE Trans., AP-4, 1956, 1, 65). As in most practical cases the amplitude distribution falls off toward the aperture edges, a modified approach to calculating the directive gain is needed; such an approach is offered in the present article. Integral formulas for the directive gain in Fresnel and Fraunhoffer regions are written, and their ratio is presented as: $D/D_{\infty} = B_1 B_2$, where each coefficient B_1 and B_2 is determined by a function of amplitude distribution along a corresponding side of the aperture. By using approximation techniques, a set of auxiliary curves is plotted which permit determining B-coefficients. Orig. art. has: 3 figures, 20 formulas, and 1 table.

SUB CODE: 09 / SUBM DATE: 29Jan66 / ORIG REF: 001 / OTH REF: 002

Card 1/1 UDC: 621.396.67.012.12.001.24

OKOLOV, F.S.; NIKOLOV, S.Kh.; IVANOV, R.F.; KOPEYKIN, V.I.; PODDUBNAYA, V.A.

Effect of ultrasonic waves on the colloidal properties of the human blood serum. Nauch. trudy Kub. gos. med. inst. 19: 111-119 '62. (MIRA 17:8)

1. Iz kafedry obshchey gigiyeny (zaveduyushchiy - zasluzhennyy deyatel' nauki Kirgizskoy SSR prof. F.S. Okolov) Kubanskogo gosudarstvennogo meditsinskogo instituta.

KOPEYKIN, V.N., assistent

Method of preparing removable dental prosthesis for toothless jaws from quick-hardening plastic material. Stomatologiia 38 no.5:69-71 S-O '59. (MIRA 13:3)

1. Iz kafedry ortopedicheskoy stomatologii (zaveduyushchiy - prof. V.Yu. Kurlyandskiy) Moskovskogo meditsinskogo stomatologicheskogo instituta (direktor - dotsent G.N. Beletskiy).
(DENTAL PROSTHESIS)

KOPEYKIN, V.N., assistent

Use of quick-hardening plastic material in the preparation of removable prosthesis. Stomatologiia 38 no.2:61-62 Ap '59 (MIRA 12:7)

1. Iz kafedry ortopedicheskoy stomatologii (zav. - prof. V.Yu. Kurlyandskiy) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dotsent G. N. Beletskiy)
(DENTAL PROSTHESIS) (PLASTICS)

KOPEYKIN, V.N., assistent

New plastic and an apparatus for preparing dental prostheses by molding under pressure. Stomatologiia 40 no.3:94-100 My-Je '61. (MIRA 14:12)

1. Iz kafedry ortopedicheskoy stomatologii (zav. - prof. V.Yu. Kurlyandskiy) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dotsent G.N.Beletskiy).

(DENTAL PROSTHESIS) (DENTAL INSTRUMENTS AND APPARATUS)
(PLASTICS)

RASKIN, Iosif Aleksandrovich; KALISH, Samuil Ionovich; MATVEYEV, Vladimir Ivanovich. Prinimali uchastiye; DUBROVSKIY, V.I.; KOPEYKIN, V.N.; D'YAKOVA, G.B., red. izd-va; IL'INSKAYA, G.M., tekhn. red.

[Installation, adjustment and operation of fans in mines]Montazh, naladka i ekspluatatsiia shakhtnykh ventiliatorov. Moskva, Gosgortekhizdat, 1962. 296 p. (MIRA 16:2)
(Mine ventilation)

KOPEYKIN, Vadim Nikolayevich; KNUBOVETS, Yakov Samuilovich; KURLYANDSKIY Veniamin Yur'yevich; OKSMAN, Isaak Mikhaylovich; KALONTAROV, D.Ye., kand. med. nauk, red.; KOROLEV, A.V., tekhn. red.

[Technique of prosthodontics] Zuboproteznaia tekhnika. [By] V.N.Kopeikin i dr. Moskva, Izd-vo "Meditsina," 1964. 343 p. (MIRA 17:4)

S/058/63/000/003/050/104
A062/A101

AUTHOR: Kopeykin, V. P.

TITLE: Novel and modernized devices of NIKFI for color sensitometry

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1963, 87, abstract 3D591 ("Uspekhi nauchn. fotogr.", 1962, v. 8, 225 - 234)

TEXT: The author describes novel and modernized devices, produced by NIKFI, for color sensitometry, and sets of sensitometric apparatus for testing color multilayer materials on transparent and opaque backings, and also a small-size developing machine for processing 35-mm films (reequipped 60П 1 (60P1)). The color sensitometer ЦС -2 М (TsS-2M) is destined for color multilayer materials on a transparent backing and for black-and-white films. The sensitometer has a stepped scale of illuminations (30-pole sensitometric wedge with a constant 0.15) at three exposures - 0.05, 0.018 and 0.012 sec. The source of light is an incandescent lamp K-33 with a plane helical wire and a color temperature of 2,850°K. The illumination in the plane of the wedge is 20 - 25 thousand lux without light filters and 3 - 6 thousand lux with a light filter of artificial solar light.

Card 1/3

Novel and modernized devices of...

The optical system includes a three-lens condenser (instead of the 6 lens), thus providing a considerably higher illumination level in the wedge plane. The color paper sensitometer ЦСБ-3 (TsSB-3) has a sensitometric wedge with a constant 0.15 and three durations of illumination - 1, 8 and 64 sec. A manual release of the shutter diaphragm is foreseen. Exposure is effected by the light of an incandescent lamp with a color temperature of 2,850°K. The illumination in the plane of the wedge is 150 - 200 lux. The color densitometer ЦД -7 (TsD-7) is destined for measuring, in transmitted light, the density of either positive or negative sensitograms on a transparent backing. Applying the attachment ПДД -4 (PDD-4), which is an illumination device complementary to the color densitometer, permits to measure on it the densities of color and black-and-white photographic papers in the reflected light. The scale of the galvanometer of the device is calibrated in units VESP (FESP) in the range of densities 0 - 3.0; the black-white fields on the transparent backing are measured in the range 0 - 5.0, and the color and black-white fields on the opaque backing - in the range of densities 0 - 2.5. The densitometer is provided with a set of changeable scales for every film form, and the reading is made directly in density units. The correction of the indications of the device is effected by tuning the radio

Novel and modernized devices of...

tubes with the aid of a special arrangement. The developing device ППЦС (PPTsS) for processing sensitograms permits to develop simultaneously 8 flexible sensitograms of the size 28 x 3.5 cm, an entire piece of 35 mm motion-picture film of 20 m length, or 8 sensitograms 9 x 12 on photographic paper.

D. Balabukha

[Abstracter's note: Complete translation]

Card 3/3

KOPEYKIN, V.P., inzh.; MIKHAYLOV, G.D., inzh.

Mechanized stabilization of soils of roadbeds. Transp. stroi. 14 no.11:7-8 N '64. (MIRA 18:3)

KOPEYKIN, V.S.

TIMOKHIN, N.A.; KOPEYKIN, V.S.

Unhairing by a solution under pressure. Leg.prom. 15 no.6:41-44 Je '55. (MLRA 8:8)

(Hides and skins)

KOPEYKIN, V.S.

Equipment used for depilation of skins. Obm.takh.opyt. [MLP] no.26:3-22 '56. (MIRA 11:11)

(Tanning)

KOPEYKIN, V.S.

New techniques used in removing and conveying flesh sides and hairs. Obm.tekh.opyt. [MLP] no.26:23-28 '56. (MIRA 11:11)
(Tanning)

FROLOV, A.I.; KOPEYKIN, V.S.

Mechanized hoists used for removing unhaired hides from lime vats.
Obm.tekh.opyt. [MLP] no.26:28-30 '56. (MIRA 11:11)
(Tanning)

BERTING, B.N.; SURASSKIY, L.V.; KOPEYKIN, V.S.

Mechanizing the cleaning of lime vats and the delivery of liming residue to customers. Obm.tekh.opyt. [MLP] no.26:46-50 '56. (MIRA 11:11)

(Tanning) (Waste products)

KOPEYKIN, V.S., inzh.

Automation of the stacking up of skins. Mekh. i avtom.proizv. 16 no.1:16-18 Ja '62. (MIRA 15:1)
(Leather industry--Equipment and supplies)
(Automation)

5(4)

AUTHORS: Chesnokov, O. F., Kopeykin, Yu. A. SOV/32-24-12-26/45

TITLE: An Improvement in the Method of Sample Dispersion in Spectral Analysis (Usovershenstvovaniye metoda prosypki prob v spektral'nom analize)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 12, pp 1487 - 1489 (USSR)

ABSTRACT: In order to improve the method mentioned in the title (Refs 1-4) an electromagnetic vibrator was used which transforms the spread-out, pulverized sample to dust and blows it into the electric arc (Fig 1). The combustion of equal amounts of sample and a uniform addition of the sample to the vibrator are carried out by a special apparatus, so that with a time of exposure of 30 seconds the duration of the addition of equal amounts of sample varies only by ± 1 second. The addition of the sample by the vibrator produces air currents, thus hindering an agglomeration of the sample, which can take place by the ordinary method involving air blowing. Two series of standards prepared with a silicon-calcium

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and containing molybdenum, tin, lead, tungsten, and nickel in the concentrations of 0.003, 0.01, 0.03 and 0.1% were analyzed by the normal method and by the method described here. The calibration curves for the same spectral lines lie considerably closer to one another in the method described here. To determine the effect of buffers the data of T. N. Zhigalovskaya (Ref 5) were used, and it was found that the introduction of buffers does not increase the sensitivity of the analysis (Fig 3). There are 3 figures and 5 Soviet references.

ASSOCIATION: Kompleksnaya geofizicheskaya ekspeditsiya Sibgeofiztresta (Combined Geophysical Expedition Sibgeofiztrest)

KOPEYKIN, Yu. D.

USSR/Physics - Unstable equilibrium FD-3093

Card 1/1 Pub. 85 - 8/16

Author : Kopeykin, Yu. D.; Leonov, M. Ya. (L'vov)

Title : A special case of loss of stability of equilibrium of a compressed rod

Periodical : Prikl. mat. i mekh., 19, Nov-Dec 1955, 736-737

Abstract : In the determination of loads causing loss of stability of definite forms of equilibrium of elastic systems one ordinarily finds those loads for which there exist along with the investigated one other forms of equilibrium. In the present note the author presents an example for which the method of Euler cannot give the solution of the problem. He considers a rod held fast at one end and centrally loaded at the free end by a longitudinal force which remains normal to the terminal cross-section during bending of the rod. The author claims that V. I. Fedos'yev's book (Izbrannyye zadachi i voprosy po soprotivleniyu materialov [Collected tasks and problems on resistance of materials], GTTI, p. 165) gives an erroneous derivation of stability of a rod under any magnitude of the compressional force.

Institution :

Submitted : September 15, 1954

KOPEYKIN, Yu.D. (L'viv).

Designing eccentrically compressed thin-walled rods using the theory of V.Z. Vlasov [with summaries in Russian and English]. Prykl.mekh. 3 no.2:169-178 '57. (MLRA 10:9)

1. L'vivskiy politekhnichniy institut.
(Elastic rods and wires)

KOPEYKIN, YU. D.

LEONOV, M.Ya.; KOPEYKIN, Yu.D.

Stability of centrally compressed thin-walled rods. Nauch.zap. IMA AN URSR. Ser.mashinoved. 6 no.5:126-129 '57. (MLRA 10:7)
(Elastic rods and wires)

SOV/124-58-8-9219 D

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 8, p 127 (USSR)

AUTHOR: Kopeykin, Yu.D.

TITLE: On the Calculation of Thin-walled Beams Subjected to Eccentric Compressive Stresses in Accordance With the V.Z. Vlasov Theory (K raschetu vnetsentrenno szhatykh tonkostennykh sterzhney po teorii V.Z. Vlasova)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the In-t stroit. mekhan. AN UkrSSR (Institute of Structural Mechanics, Academy of Sciences, Ukrainian SSR), Kiyev, 1958

ASSOCIATION: In-t stroit. mekhan. AN UkrSSR (Institute of Structural Mechanics, Academy of Sciences, Ukrainian SSR), Kiyev

(KL-16-58, p.120)

Card 1/1

KOPEYKIN, Yu.D. (L'vov)

Formation of problems on the search of stress functions by means of biharmonic potentials. Prikl. mekh. 1 no.2:104-109 '65. (MIRA 18:6)

1. L'vovskiy politekhnicheskiy institut.

L 53781-65 EWT(d)/EWT(m)/EWP(w)/EWA(d) IJP(c) EM

ACCESSION NR: AP5014823 UR/0198/65/001/005/0029/0035

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AUTHOR: Kopeykin, Yu. D. (L'vov)

TITLE: Integral equations for the spatial problem of elastic body statics

SOURCE: Prikladnaya mekhanika, v. 1, no. 5, 1965, 29-35

TOPIC TAGS: integral equation, potential theory, boundary value problem, biharmonic function, statics, elasticity theory

ABSTRACT: Four fundamental boundary value problems are discussed in the statics of elastic bodies by introducing new singular integral equations. The stress function

$$\bar{a} = \int_S \times \frac{\cos\varphi}{r^2}\, ds,$$

is investigated in detail, and the singular integral equation for the first fundamental, as well as the internal boundary value problem, are given by

$$2(1+\mu)\varkappa_{i0} - a_{i0}\sum_{j=1}^{3} a_{j0}\varkappa_{j0} = -\frac{\eta}{4\pi} f^{(i)} + \frac{\eta}{\pi}(1+\mu) F \qquad i = 1, 2, 3$$

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where $\gamma_{(1)}$ is an integral that appears in the stress function equation. The solution is given for the vector density χ_{10}, and two types of stress functions are considered

$$a_i = \frac{\partial}{\partial x_{10}} \int_S \frac{\nu_i}{r}\, ds; \qquad a_i = \frac{\partial}{\partial x_{20}} \int_S \frac{\nu_i}{r}\, ds; \qquad a_i = \frac{\partial}{\partial x_{30}} \int_S \frac{\nu_i}{r}\, ds. \; a_i = \frac{d}{dn_0} \int_S \frac{\nu_i}{r}\, ds = \int_S \nu_i \frac{\cos \psi}{r^2}\, ds, \qquad i = 1; 2; 3$$

for this first case. The second boundary value problem gives a biharmonic function

$$\xi = \frac{1}{2(1-\mu)} \operatorname{div} \bar{g}$$

for a stress function

$$a_i = \int_S \frac{\dot{\nu}_i}{r}\, ds; \qquad i = 1; 2; 3; \qquad \bar{a} = \int_S \frac{\bar{\nu}}{r}\, ds.$$

This same stress function is used for the third boundary value problem leading to the integral equation

$$\nu_{i0} = -\frac{(1-2\mu)\,\eta}{4\pi(1-\mu)} \left[f_i^{(0)} + \frac{\omega_i}{G} \int_S \frac{1}{r} \left(\nu_i + \frac{\beta_i}{1-2\mu} \sum_{j=1}^{3} \beta_j \nu_j \right) ds \right| + \frac{\eta \Phi_i}{4\pi G}.$$

$$i = 1; 2; 3.$$

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The stress function for the fourth boundary value problem is given by

$$a_i = \int_{S_1} \frac{\nu_i}{r} ds + \int_{S_0} \frac{\varkappa_i \cos\varphi}{r^3} ds.$$

The corresponding integral equation is obtained as a set of three equations with [illegible] singularity properties as the first three boundary value problems. "The [illegible] G. V. Savin and S. G. Mikhlin for [illegible] in discussing this [illegible] art. has 28 equations.

ASSOCIATION: L'vovskiy politekhnicheskiy institut (L'vov Polytechnic Institute)

SUBMITTED: Apr64 ENCL: 00 SUB CODE: MA, AI

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ATM

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Kopeykin, Yu. P.

USSR/Soil Science - Genesis and Geography of Soils. J-2

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10482

Author : Kopeykin, Yu.P.

Inst : Northern Ossete Agricultural Institute

Title : Several Characteristics of the Chemical Composition of the Chernozems of the Alkhanchurt Valley.

Orig Pub : Tr. Severo-Osetinsk. s.-kh. in-ta, 1956, 17, 65-80.

Abstract : Carbonate and saline chernozems are found throughout the valley. In the carbonate chernozems the A B horizons are 60-80 cm. thick; the structure is dusty-lumpy and grainy-lumpy. The humus of the A horizon contains 5-8% nitrogen; calcium predominates in the absorbed bases (86% of the total cations), while there is a heightened content of magnesium. The saline chernozems have thinner humus horizons -- 50-60 cm., a compact profile, coarsely-

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KOPEYKIN, Yu.V.

Resources and composition of humus in the Chernozem soils of the Alkhan-Churt Valley. Pochvovedenie no.7:99-105 Jl '63. (MIRA 16:8)

1. Severo-osetinskaya gosudarstvennaya sel'skokhozyaystvennaya opytnaya stantsiya.
(Alkhan-Churt Valley—Humus)
(Alkhan-Churt Valley—Chernozem soils)

KOPEYKIN, Yuriy Vissarionovich; RUBILIN, Ye.V., prof., rukovoditel' raboty; TROFIMENKO, K.I., dotsent, rukovoditel' raboty; FILIPENOK, T.G., red.

[Soils of the Alkhanchurt Valley.] Pochvy Alkhan-Churtskoi doliny. [Groznyi] Checheno-Ingushskoe knizhnoe izd-vo, 1963. 141p. (Grozny. Checheno-Ingushskii nauchno-issledovatel'skii institut. Izvestiia, vol.7). (MIRA 17:12)

17(2) SOV/177-58-11-12/50

AUTHORS: Ostrovskiy, I.I., Lieutenant-Colonel of the Medical Corps, Kopeykina, A.A., Major of the Medical Corps

TITLE: The Organization of Virological Investigations in Influenza in the Laboratory of a Travelling Sanitary-Epidemiologic Squadron

PERIODICAL: Voyenno-meditsinskiy zhurnal, 1958, Nr 11, pp 43 - 45 (USSR)

ABSTRACT: The authors state that laboratory diagnosis is the only reliable method for recognizing virological influenza. The studied the local outbreaks of influenza during the spring-summer period of 1957 [illegible] applying virological diagnosis in the bacteriological laboratory of a travelling sanitary-epidemiologic squadron. The investigations included determination of the types of viruses eliminated by patients and the reactions of the inhibition of hemagglutination of twin sera of persons who had had influenza. In May, in the

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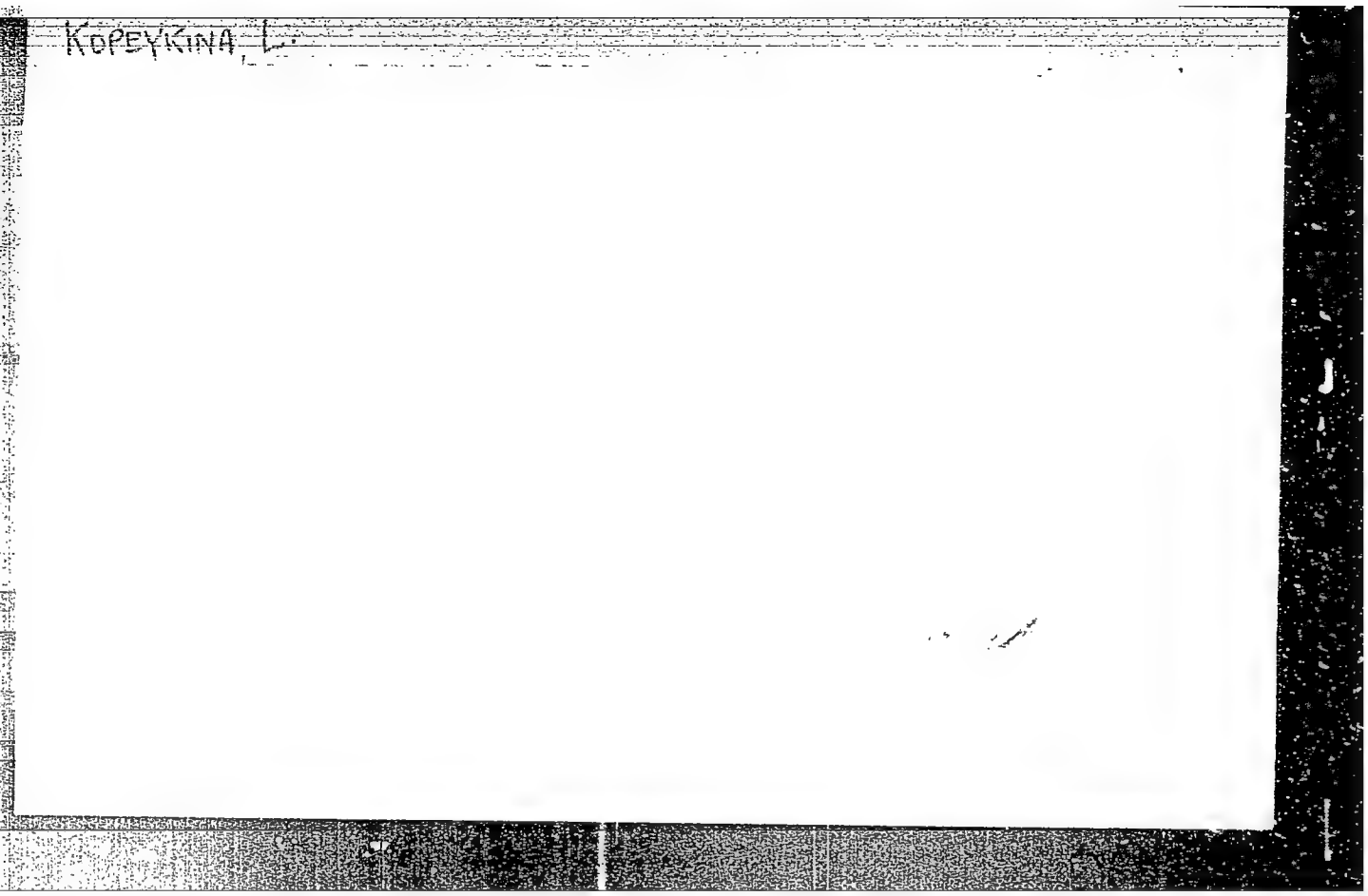
The Organization of Viro-/logical Investigations in Influenza in the Laboratory of a Travelling Sanitary-Epidemiologic Squadron

pharynx rinsing water of patients of three military units, strains of the influenza virus were found; the hemagglutination reaction was clearly pronounced in the titer 1:40 - 1:80. The Institut virusologii imeni Ivanovskogo (Institute of Virology imeni Ivanovskiy) classified the virus as type A_1 with certain immunological distinctions. In June, influenza viruses A and A_1 were found and identified again, in September, type A_2 was investigated in the laboratory of the Department for Diagnosis of Influenza of the Institut virusologii AMN SSSR (Institute of Virology of the AMN USSR). With antiserum "Singapur", the strains were neutralized up to the full titer. In January/February, the increase of virucidal antibodies was investigated in twin sera of patients who had been injected against influenza with monovalent vaccine A_2 and polyvalent vaccine A,A_1,B,C and D and

KOPKYKINA, A.A.

Preparation and preservation of a thrombocyte mass. Probl. gemat. i perel. krovi 8. no.1:38-42 Ja '63. (MIRA 16:5)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta gematologii i perelivaniya krovi (direktor - dotsent D.G. Petrov).
(BLOOD PLATELETS) (BLOOD—TRANSFUSION)



KAPUSTIN, B.N., glav. inzh.; GVOZDEV, T.T., glav. inzh.; GRIGOROVICH, V.D., inzh.; KONDRASHENKO, A.A., inzh.; ABADEYEV, Yu.A., inzh.; RYADNOV, A.A., inzh.; YEGORYCHEV, V.P., inzh.; SHMEL'KIN, B.A., inzh.; MARSHUTIN, S.F., inzh.; KHODZHABARONOV, K.G., inzh.; FEDOSOVA, Ye.M., tekhnik; OSIN, V.I., tekhnik; SEMENOVA, Ye.P., tekhnik; AVSARAGOVA, G.A., tekhnik; PASHKEYEV, D.A., inzh.; KAPUSTIN, V.N., inzh.; NAGOROV, L.A., inzh.; IONOV, I.T., inzh.; KOPEYKINA, L.M., inzh.; TELEPNEVA, T.P., tekhnik; CHAKURIN, Zh.G., tekhnik

[Album of the mechanization of labor-consuming processes in stockbreeding] Al'bom mekhanizatsii trudoemkikh protsessov v zhivotnovodstve. Moskva, Izd-vo Giprosel'khoza. No.4. [Equipment and supplies for the mechanization of labor-consuming processes on livestock farms] Oborudovanie i inventar' dlia mekhanizatsii trudoemkikh protsessov na zhivotnovodcheskikh fermakh. 1959 [cover: 1961. 229] p. (MIRA 15:7)

1. Gosudarstvennyy institut po proyektirovaniyu sel'skokhozyaystvennykh sooruzheniy (for Kapustin, Grigorovich, Kondrashenko, Abadeyev, Ryadnov, Yegorychev, Shmel'kin, Marshutin, Khodzhabaronov, Fedosova, Osin, Semenova, Avsaragova).

(Continued on next card)

KAPUSTIN, B.N.---(continued). Card 2.

2. Respublikanskiy gosudarstvennyy institut po proyektirovaniyu sovkhoznogo stroitel'stva (for Gvozdev, Pashkeyev, Kapustin, V.N., Nagorov, Ionov, Kopeykina, Telepneva, Chakurin).

(Agricultural machinery)

RUBASHKIN, A.S., zh.; TSEYTLIN, R.A., inzh.; MAKAROV, A.S., inzh.; KOPEYKINA, L.V., red.

[Methods for adjusting the automatic control systems of once-through type boilers] Metodika naladki sistem avtomaticheskogo regulirovaniia priamotochnykh kotlov. Moskva, Izd-vo "Energiia," 1964. 110 p. (MIRA 17:6)

1. ORGRES, trust, Moscow.

VARTAZAROV, S.Ya., kand. tekhn. nauk; KOROTKOV, L.I., inzh., red. KOPEYKINA, L.V., red.

[Use of radioactive isotopes in operating electric power plants] Ispol'zovanie radioaktivnykh izotopov pri ekspluatatsii elektrostantsii. Moskva, Izd-vo "Energiia," 1964. 101 p. (MIRA 17:6)

BELOV, N.V., inzh.; NOYEV, V.N., inzh.; OBRAZTSOVA, N.V., inzh., red.; YALYSHEV, Z.S., inzh., red.; KOPEYKINA, L.V., red.

[Methods of industrial thermochemical testing of barrel boilers] Metodika ekspluatatsionnykh teplokhimicheskikh ispytanii barabannykh kotlov. Moskva, Izd-vo "Energiia," 1964. 126 p. (MIRA 17:6)

1. ORGRES, trust, Moscow.

TIKHONOV, N.F.; KOPEYKINA, L.V., red.; BUL'DYAYEV, N.A., tekhn. red.

[Saving of electric power at the Chelyabinsk Tractor Factory] Ekonomiia elektroenergii na Cheliabinskom Traktornom zavode. Moskva, Gosenergoizdat, 1963. 126 p.
(MIRA 16:6)

(Electric power)

VASIL'YEV, S.V., inzh., red.; KOPEYKINA, L.V., red.; FRIDKIN, L.M., tekhn. red.

[Present state and measures for the further improvement of industrial safety and safety engineering on construction sites, enterprises, and in organizations of the State Production Committee on Power Engineering and Electrification of the U.S.S.R.; collection of papers presented at a conference in Moscow on July 27-30 1962] O sostoianii i merakh po dal'neishemu uluchsheniiu okhrany truda i tekhniki bezopasnosti na stroikakh, predpriiatiiakh i v organizatsiiakh Gosudarstvennogo proizvodstvennogo komiteta po energetike i elektrifikatsii SSSR; sbornik materialov soveshchaniia, 27-30 iiulia 1962 g. Moskva, Gosenergoizdat, 1963. 190 p.
(MIRA 17:3)

1. Soveshchaniye po okhrane truda i tekhnike bezopasnosti na stroykakh i predpriyatiyakh ministerstva stroitel'stva elektrostantsii SSSR, Moscow, 1962.

BARISHPOLOV, V.F., inzh.; SKVORTSOV, A.A., kand. tekhn. nauk, red.; KOPEYKINA, L.V., red.

[Outdoor heating networks; aid for technical inspectors and foremen of construction and installation organization] Naruzhnye teplovye seti; v pomoshch' tekhnadzoru i masteram stroitel'no-montazhnykh organizatsii. Moskva, Energiia, 1964. 29 p. (MIRA 18:3)

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LOBANOV, M.M., inzh.; DRABYNA, Ye.Ye., inzh., red.; KOPEYKINA, L.V., red.

[Problems of the automation of pulverized coal systems with ball mills] Voprosy avtomatizatsii pylesistem s sharovymi barabannymi mel'nitsami. Moskva, Energiia, 1965. 71 p. (MIRA 18:9)

STERNINSON, L.D., inzh., red.; KOPEYKINA, L.V., red.

[Automatic control of power transfer through inter-system links] Avtomaticheskoe regulirovanie peretokov moshchnosti po mezhsistemnym sviaziam. Moskva, Energiia, 1965. 199 p. (MIRA 18:7)

1. Nauchno-tekhnicheskoye soveshchaniye po avtomaticheskomu regulirovaniyu peretokov moshchnosti po mezhsistemnym svyazyam. Lvov, 1963.